

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for determining dental alignment of a 3-dimensional model of one or more teeth of a patient for purpose of fitting a prosthesis, said method comprising the steps of:
 - (a) obtaining a radiograph of the teeth of the patient;
 - (b) obtaining a digital image from the radiograph indicative of the vertical alignment of the teeth relative to a gum line of the patient, wherein the alignment pertains to the relative vertical position of one or more of the patient's teeth as compared to adjacent teeth;
 - (c) overlaying the 3-dimensional model of the teeth with the digital image obtained from the radiograph;
 - (d) determining vertical and horizontal mis-alignment of at least three teeth in the 3-dimensional model relative to the digital image obtained from the radiograph; and
 - (e) adjusting the 3-dimensional model to correct for nonlinear shape and mis-alignment, thereby producing an adjusted 3-dimensional model of the prosthesis that is corrected for the vertical and horizontal alignment of the teeth adjacent to the prosthesis and providing precisely fitted curvature data of the teeth as part of a dental arch.
2. (previously presented) The method as claimed in claim 1 wherein the adjusted 3-dimensional model is used to fabricate the prosthesis.
3. (previously presented) The method as claimed in claim 1 wherein the step (e) of adjusting the 3-dimensional model comprises adjusting size, shape and position of the prosthesis in the 3-dimensional model.

4. (previously presented) The method as claimed in claim 1 wherein the step (b) of obtaining the digital image comprises identifying key vertices of three or more teeth in the radiograph and fitting a vertices curve through the vertices.

5. (previously presented) The method as claimed in claim 4 wherein the step (c) of overlaying comprises overlaying the vertices curve over the 3-dimensional image whereby the curve is used in step (d) to determine mis-alignment.

6. (previously presented) The method as claimed in claim 1 wherein the step (b) of obtaining the digital image comprises identifying center of mass points of three or more teeth in the radiograph and fitting a center of mass curve through the center of mass points.

7. (original) The method as claimed in claim 6 wherein the step (c) of overlaying comprises overlaying the center of mass curve over the 3-dimensional image such that the center of mass curve is used in step (d) to determine mis-alignment.

8. (currently amended) The method as claimed in claim 1 wherein the step ~~(a)~~ (b) of obtaining the digital image comprises forming an outline of three or more teeth in the radiograph and wherein the outline is used in step (d) to determine mis-alignment.

9. (previously presented) The method as claimed in claim 2 further comprising the step of measuring the displacement of one or more key points on each tooth in the digital image from a horizontally aligned vertical reference, and using the displacement to form a template or fixture that can be used to check the fit of the prosthesis fabricated from the adjusted 3-dimensional model relative to the gum line.

10. (original) The method as claimed in claim 9 wherein the horizontally aligned vertical reference is located relative to the highest point on the teeth and to the position of the gum line.

11. (original) The method as claimed in claim 9 wherein the horizontally aligned vertical reference is an arbitrary distance from the teeth independent of the gum line.